

**REMARKS**

Claims 1-26 were presented for examination and claims 1-9 and 12-24 were rejected. Applicants note with appreciation the Examiner's indication of allowable subject matter in claims 10, 11, 25 and 26, which were objected to as being dependent upon a rejected base claim but are allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In the present amendment, claims 7 and 22 have been amended to address informalities, and claims 6, 12 and 16 have been canceled. No new matter has been introduced. Upon entry of the present amendment, claims 1-5, 7-11, 13-15 and 17-26 will be currently pending in this application, of which claims 1, 7, 13, 15, 17 and 22 are independent. Applicants submit that claims 1-5, 7-11, 13-15 and 17-26 are in condition for allowance.

The following comments address all stated grounds of rejection. Applicants respectfully traverse all rejections and urge the Examiner to pass the claims to allowance in view of the remarks set forth below.

**DRAWING OBJECTIONS**

The Examiner objects to the drawings and contends that Fig. 1 and 2 should be designated by a legend such as -- Prior Art -- because only that which is old is illustrated. Applicants respectfully traverse this objection. Applicants disagree with the Examiner's contention that Fig. 1 and 2 only illustrates prior art. At least the Security Gateway labeled 130 in Fig. 1 and 2 illustrate an embodiment practicing the present invention. Therefore, these figures do not solely illustrate prior art and thus, no corrected drawings are submitted herewith.

Accordingly, Applicants respectfully request the Examiner to withdraw the objection to the drawings.

### **SPECIFICATION OBJECTIONS**

The Examiner objects to the disclosure because it contains embedded hyperlinks (paragraphs 38, 72, 75, 80, etc) and/or other form of browser-executable code. Applicants respectfully traverse this objection. Applicants submit that each of the cited hyperlinks is used only to support the description of the claimed invention in the specification. Furthermore, Applicants submit that the hyperlinks are not intended to be browser executable and are not intended to incorporate any references. Therefore, Applicants respectfully request the Examiner to withdraw the objection to the specification.

### **CLAIM OBJECTIONS**

Claims 7 and 22 are objected to because of informalities. Examiner contends that “URL” references in claims 7 and 22 must be spelled out. Applicants have amended claims 7 and 22 to address these informalities. Thus, Applicants respectfully request the Examiner to withdraw the objection to the claims.

### **CLAIM REJECTIONS UNDER 35 U.S.C. §101**

#### **I. Claims 15 and 17-26 Rejected Under 35 U.S.C. §101**

Claims 15 and 17-26 are rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. The Examiner contends that the systems of claims 15 and 17-26 may be hardware or a combination of hardware and software, and as such, the claims are not limited to

statutory subject matter and are therefore non-statutory. Applicants respectfully submit that Claims 15 and 17-26 claim statutory subject matter.

Further in accordance with proper examination of claims, MPEP § 2106 (IV) requires that the Examiner first consider the breadth of 35 U.S.C. § 101 to determine whether the claimed invention falls within an enumerated statutory category. Statutory subject matter, as contemplated by 35 U.S.C. § 101, includes “any new and useful process, machine, manufacture, or composition of matter under the sun that is made by man.”

Claim 15 discloses a system for inferencing data type of scalar objects, and so claims a statutory subject matter. Claims 17-21 disclose a system for filtering messages routed across a network, and so claims a statutory subject matter. Claims 22-26 disclose a system for filtering URL messages routed across a network, and so claims a statutory subject matter. The Examiner suggests that because these systems may be hardware or a combination of hardware and software, that somehow this makes the subject matter of these claims non-statutory. However, these systems regardless if embodied in hardware or a combination of hardware and software are directed to statutory subject matter.

For these reasons, Applicants respectfully submit that claims 15 and 17-26 claim statutory subject matter per 35 U.S.C. § 101, and that the rejections made pursuant to 35 U.S.C. § 101 be withdrawn.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. §102**

##### **II. Claims 1, 4-5, 7, 13-15, 17, and 20-22 Rejected Under 35 U.S.C. §102**

Claims 1, 4-5, 7, 13-15, 17, and 20-22 are rejected under 35 U.S.C. §102(a) as anticipated by U.S. Patent Publication No. 2004/0015463 to Herrera et al. (“Herrera”). Applicants

respectfully traverse this rejection. Claims 1, 7, 13, 15, 17 and 22 are independent claims. Claims 4-5 depend on and incorporate all the patentable subject matter of independent claim 1, claim 14 depends on and incorporate all the patentable subject matter of independent claim 13, and claims 20-21 depend on and incorporate all the patentable subject matter of independent claim 17. Applicants submit that Herrera fails to disclose each and every element recited in these claims.

A. Claims 1 and 17 Patentably Distinguished over Herrera

Claim 1 is directed to a computer-implemented method and claim 17 is directed to a system. Claims 1 and 17 recite determining, for values of the same field name, a most restrictive data type of the values. Herrera fails to disclose each and every element of the claimed invention.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Herrera does not disclose determining, for values of the same field name, a most restrictive data type of the values. The Examiner cites the section of Herrera (paragraphs 78-82), that describe constraints on field values. The constraints define conditions that should be true regarding field values, and also define actions in response to a violation of these conditions. Herrera does not disclose determining the constraints – how the constraints are determined. Moreover, the constraints do not describe a most restrictive data type of values. Thus, Herrera fails to disclose each and every element of the claimed invention.

Because Herrera fails to disclose each and every element of independent claim 1, Applicants submit that claims 1 and 17 are patentable and in condition for allowance. Claims 4 and 5 depend on and incorporate all the patentable subject matter of independent claim 1. Claims 20 and 21 depend on and incorporate all the patentable subject matter of independent

claim 17. Thus, Herrera fails to detract from the patentability of these dependent claims. Accordingly, Applicants submit that claims 4-5 and 20-21 are also patentable and in condition for allowance. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 1, 4-5, 17 and 20-21 under 35 U.S.C. §102.

**B. Claims 7 and 22 Patentably Distinguished over Herrera**

Claim 7 is directed to a computer-implemented method and claim 7 is directed to a system. Claims 7 and 22 recite extracting URL components from the messages, determining, for URL components at the same level, with the same root URL component, a most restrictive data type of the URL component. Herrera fails to disclose this element of the claimed invention.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Herrera fails to disclose the step of determining, for URL components at the same level, with the same root URL component, a most restrictive data type of the URL component. The Examiner cites the section of Herrera (paragraphs 78-82), describing the structure and role of elements within rulebases, domains and rulesets. The elements include constraints, which define conditions that should be true regarding field values, and which also define actions in response to a violation of the conditions. Herrera does not disclose extracting URL components from messages, nor does it disclose determining the constraints. Moreover, the constraints do not describe a most restrictive data type of values. Thus, Herrera fails to disclose each and every element of the claimed invention.

Because Herrera fails to disclose each and every element of independent claims 7 and 22, Applicants submit that claims 7 and 22 are patentable and in condition for allowance. Thus,

Applicants respectfully request that the Examiner withdraw the rejection of claims 7 and 22 under 35 U.S.C. §102.

C. Claims 13 and 15 Patentably Distinguished over Herrera

Claim 13 is directed to a computer-implemented method and claim 15 is directed to a system. Claims 13 and 15 recite determining a match factor for a data type, the match factor indicating a fraction of scalar objects that match the data type. Herrera fails to disclose this element of the claimed invention.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Herrera fails to disclose the step of determining a match factor for a data type, the match factor indicating a fraction of scalar objects that match the data type. The Examiner cites the section of Herrera (paragraphs 350-352) describing an inference engine reacting to values falling within range limits in test groups by either executing rules or terminating the test groups. Here, Herrera describes values that fall within range limits, but does not disclose values that match a data type. Range operators described in the test groups apply to magnitudes rather than data types. In addition, Herrera describes executing rules by the inference engine, but does not specifically disclose determining a match factor for a data type. Thus, Herrera fails to disclose each and every element of the claimed invention.

Because Herrera fails to disclose each and every element of independent claim 13, Applicants submit that claim 13 is patentable and in condition for allowance. Claim 14 depends on and incorporate all the patentable subject matter of independent claim 13. Thus, Herrera fails to detract from the patentability of this dependent claim. Accordingly, Applicants submit that

claim 14 is also patentable and in condition for allowance. Therefore, Applicants respectfully request that the Examiner withdraw the rejection of claims 13 and 14 under 35 U.S.C. §102.

**CLAIM REJECTIONS UNDER 35 U.S.C. §103**

III. Dependent claims 2-3, 6, 8-9, 12, 16, 18-19 and 23-24 Rejected Under 35 U.S.C. §103

Dependent claims 2-3, 6, 8-9, 12, 16, 18-19 and 23-24 are rejected under 35 U.S.C. §103 as unpatentable over Herrera, and further in view of U.S. Patent 7,089,542 to Brand et al. (“Brand”). Claims 6, 12 and 16 have hereby been canceled, therefore mooted rejections with respect to these claims. Claims 2 and 3 depend on and incorporate all the patentable subject matter of independent claim 1. Claims 8 and 9 depend on and incorporate all the patentable subject matter of independent claim 7. Claims 18 and 19 depend on and incorporate all the patentable subject matter of independent claim 17. Claims 23 and 24 depend on and incorporate all the patentable subject matter of independent claim 22. Applicants respectfully traverse this rejection and submit that Herrera in view of Brand, alone or in combination, fails to teach or suggest each and every element recited in claims 2-3, 8-9, 18-19 and 23-24.

A. Claims Dependent from Patentable Independent Claims 1, 7, 17 and 22

For the reasons discussed above in connection with the rejection of the independent claims 1, 7, 17 and 22, Applicants submit independent claims 1, 7, 17 and 22 are patentable and in condition for allowance. Thus, claims dependent from claims 1, 7, 17 and 22 are patentable and in condition for allowance. These include 2-3, 8-9, 18-19 and 23-24. As such, Applicants submit that dependent claims 2-3, 8-9, 18-19, and 23-24 are patentable and in condition for allowance.

In the Office Action, the Examiner admits that Herrera does not expressly disclose generating nor applying a rule using the most restrictive data type of URL components or values for a field name. The Examiner cites Brand in the Office Action only to suggest one ordinarily skilled in the art might modify Herrera to generate or apply a rule using the most restrictive data type of URL components or values for a field name. However, as with Herrera, Brand does not disclose, teach or suggest generating or applying a rule using the most restrictive data type of URL components or values for a field name.

Brand describes a method and apparatus for analyzing software programs for faults, and discloses a constraint solver that takes in a set of conditions as input for the analysis, with possible outputs including: “the conditions are satisfiable;” “the conditions are not satisfiable;” or “cannot decide within given time limit.” Satisfiable conditions normally imply that a feasible path traversing the software containing a fault is found. The Examiner cites Brand (col. 8, lines 5-50), which describes the data structure, operation, inputs and outputs of the constraint solver, and then contemplates and contrasts two levels of constraint solvers. Brand does not describe a most restrictive data type determined from the input to the constraint solver. Therefore, Brand does not disclose, teach or suggest generating or applying a rule using the most restrictive data type of URL components or values for a field name. Hence, Herrera in view of Brand fails to teach or suggest each and every feature of the claimed invention.

Because Herrera in view of Brand, alone or in combination, fails to detract from the patentability of the claimed invention, Applicants submit dependent claims 2-3, 8-9, 18-19, and 23-24 are patentable and in condition for allowance. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 2-3, 8-9, 18-19, and 23-24 under 35 U.S.C. §103.



**CONCLUSION**

In light of the aforementioned amendments and arguments, Applicants contend that each of the Examiners rejections has been adequately addressed and all of the pending claims are in condition for allowance. Accordingly, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of all of the pending claims.

Should the Examiner feel that a telephone conference with Applicants' attorney would expedite prosecution of this application, the Examiner is urged to contact the Applicants' attorney at the telephone number identified below.

Respectfully submitted,

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